Remarks

Reconsideration and allowance of this application, as amended, are respectfully requested.

Claim 1 has been amended to incorporate a feature of the invention previously presented in claim 5. Claims 3, 4, 7, 9, 10, and 13 have been amended for consistency with instant claim 1. Claim 5 has been canceled without prejudice or disclaimer. Claims 1-4 and 6-13 are now pending in the application. Claim 1 is independent. The rejections are respectfully submitted to be obviated in view of the amendments and remarks presented herein. No new matter has been introduced through the foregoing amendments.

Applicant respectfully submits that no Request for Continued Examination is necessary since the subject matter of claim 5 now incorporated in claim 1 has been previously considered by the examiner. Accordingly, entry of each of the amendments is respectfully requested.

35 U.S.C. § 103(a) – Shaldon

Claims 1, 2, and 6-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,284,141 to Shaldon et al. (hereinafter "Shaldon").

The rejection of claims 1, 2, and 6-8 under § 103(a) based on Shaldon is respectfully deemed to be obviated. For at

least the following reasons, the disclosure of Shaldon would not have rendered obvious Applicant's presently claimed invention.

Instant claim 1 defines an embodiment of this invention in which the substance whose concentration is detected is potassium. As outlined in the instant specification (see, e.g., pages 1-4), the speed by which a substance is withdrawn from a patient during a blood treatment is particularly relevant in the case of potassium. In other cases, where one has a substance like urea, the extraction speed or rate is usually not so relevant for the physician as long as a certain amount of the substance is extracted or a certain level in the blood is achieved. That is, with potassium, it is very important to control the level in the blood, the transfer rate, and the total amount removed. The aforementioned requirement is quite different from toxins like urea, which one typically wants to extract as quickly as possible.

Therefore, the present invention enables a more precise and safer control of potassium in the blood of a dialysis patient. The aforementioned characteristics of this invention correct a problem that heretofore has not been properly addressed in the prior art.

There is simply no teaching in Shaldon that would have led one to modify the reference in a way that would result in the invention defined by Applicant's instant claim 1. Accordingly, the disclosure of Shaldon would not have rendered obvious Applicant's claimed invention. Claims 2 and 6-8 are allowable because they

depend, either directly or indirectly, from claim 1, and for the subject matter recited therein.

35 U.S.C. § 103(a) - Shaldon and Bosetto

Now pending claims 3, 4, and 9-13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shaldon in view of U.S. Patent No. 6,793,827 to Bosetto et al. ("Bosetto").

The rejection of now pending claims 3, 4, and 9-13 under § 103(a) based on Shaldon and Bosetto is also respectfully deemed to be obviated. All of claims 3, 4, and 9-13 depend, either directly or indirectly, from claim 1. Claim 1 is allowable over Shaldon for at least the above-described reasons. Therefore, claims 3, 4, and 9-13 are also allowable.

And, regardless of what Bosetto may disclose with regard to the use of sensors, the disclosure of Bosetto does not rectify the above-described deficiencies of Shaldon. Bosetto is - to quite some extent - devoted to the disclosure of the undesirable effects due to potassium during blood treatments (column 1, line 55, to column 2, line 7). In spite of this, Bosetto is silent with regard to monitoring of the transfer rate. Bosetto discloses the possibility of performing a treatment with a fixed reference concentration or a profile "stored beforehand" (column 6, lines 19-26). To monitor the potassium level, Bosetto mentions a probe 26 for measuring the potassium concentration in the dialysate

downstream of the dialyser as a monitor in view of the reference value (column 6, lines 28-40).

However, the very same disclosure cannot *at the same time* disclose or suggest Applicant's claimed feature of "the analyzer unit being configured (i) to determine on the basis of detected values of the at least one sensor . . . the instantaneous transfer rate $\Delta M/\Delta t$ of the substance through the membrane." The aforementioned feature of Applicant's claimed invention is an *additional* element whose relevance in particular for potassium has not been recognized by either Shaldon or Bosetto.

Accordingly, the combined disclosures of Shaldon and Bosetto would not have rendered obvious the invention defined by any of Applicant's now pending claims 3, 4, and 9-13.

In view of the foregoing, this application is now in condition for allowance. If the examiner believes that another interview might expedite prosecution, the examiner is invited to contact the undersigned.

Respectfully submitted,

JACOBSON HOLMAN PLLC

By: John C. Elmer Reg. No. 54,378
Harvey B. Jacobson, Jr.
Reg. No. 20,851

400 Seventh Street, N. W.
Washington, D.C. 20004
Telephone: (202) 638-6666
Date: September 28, 2009